

eMARS Interfaces

A guide to developing Interfaces and Check Writer files for
eMARS

September 2005

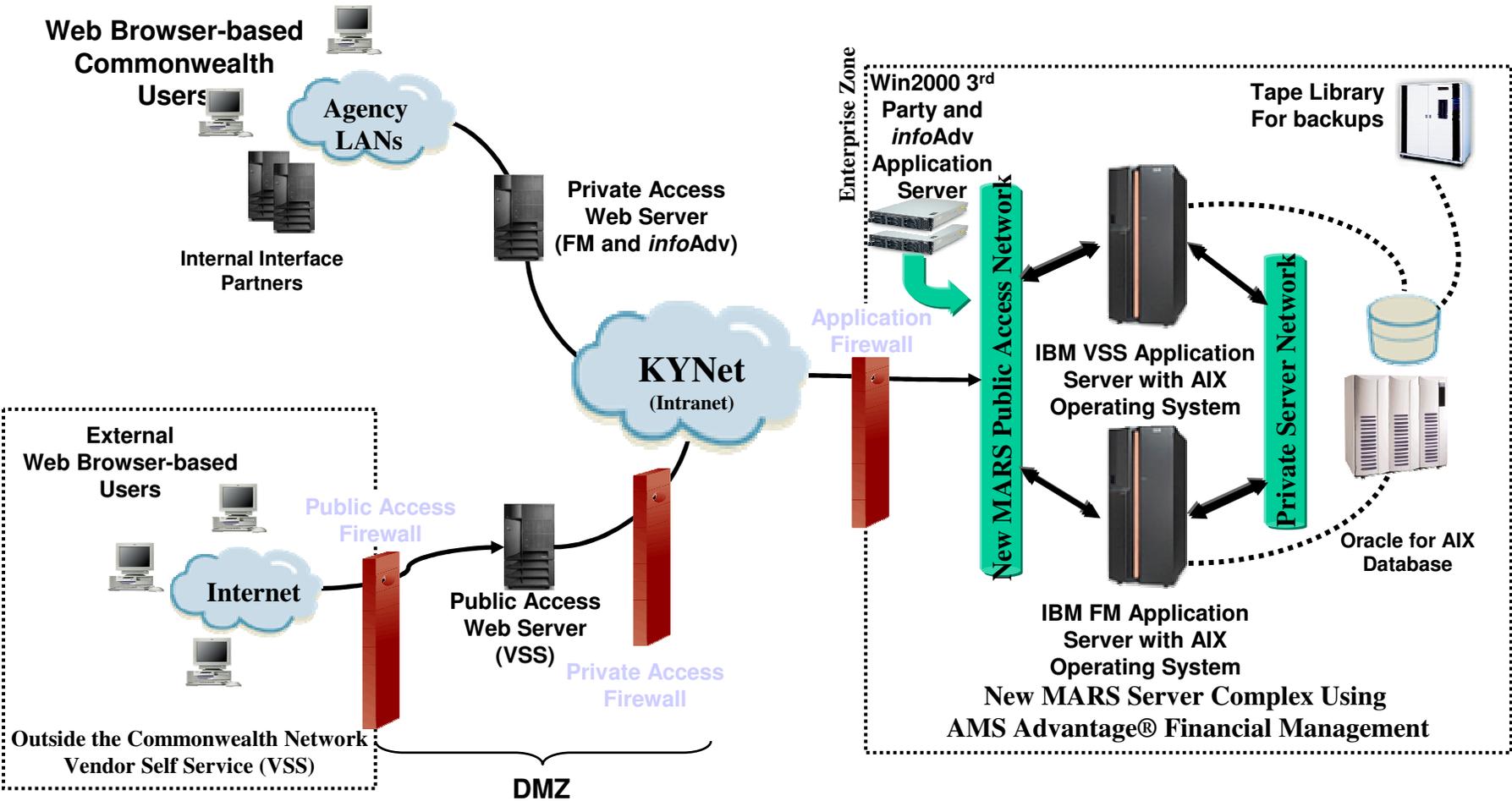


Agenda

- eMARS Technical Overview
- eMARS Interface Approach
- eMARS Documents
- eMARS Interface Templates
- eMARS Check Writer Template
- eMARS Interface Implementation



eMARS Technical Overview



eMARS Interface Approach

- Interface Plan
 - Overview
 - Definitions
- Interface Methods and Components
- Interface Architecture
 - Interface Requirements
 - Mars Interface Architecture
 - eMARS Interface Architecture
- Crosswalk of Documents



eMARS Interface Approach

Interface Plan - Overview

- Interface Inventory List
- Current State - MARS
 - Flat file, standard document layout
 - FTP unencrypted files to datasets on mainframe by cutoff time
- Future State - eMARS
 - XML (Extensible Markup Language) file format
 - Online secure (HTTPS) process to upload interface files
 - Files can be processed during the day



eMARS Interface Approach

Interface Plan - Overview

- Transition Strategy
 - XML templates provided for inbound interfaces
 - Extract templates from Data Warehouse for outbound interfaces
 - Standard format and process
 - Agencies - focus on critical interfaces first



eMARS Interface Approach

Interface Plan - Definitions

- **Interface:** A transfer of data inbound to or outbound from the eMARS databases and/or application.
- **Document:** An eMARS document such as a GAX (General Accounting Expenditure) or CR (Cash Receipt) document.
- **Table:** A database table within eMARS that can be updated with an interface.
- **Record:** Data specific to a single table or document. NOTE: A complete document may need to be separated into multiple detail records to allow capture of all necessary information.
- **Transaction:** A complete set of Records.
- **File:** One or more transactions.
- **Department:** Interfacing partner. In most cases, a Commonwealth department. Some interfaces are with external entities, such as bank check transmissions and p-card transmissions.



eMARS Interface Approach

Interface Methods and Components

- Advantage Process Framework
 - Provides common infrastructure services
 - Operates within the Versata Logic Server (VLS)
 - Underlying object code is same for eMARS tables and documents online and offline processing
 - Single code base



eMARS Interface Approach

Interface Methods and Components

- Batch Catalog
 - Online table defines batch processes to the Advantage application
- Job Manager
 - Set of online application pages allows users to
 - Submit or schedule jobs
 - View job status and results, pending jobs
 - Delete or kill jobs



eMARS Interface Approach

Interface Methods and Components

- Advantage Scheduler
 - Online utility used to configure offline job processing
 - Job frequency – immediate, daily, weekly, monthly
 - Job dependencies – define rules based on the success of other jobs
 - Parameter files – can be provided online or offline
- Job Interaction Client
 - Allows offline access to the Job Manager for executing batch jobs
 - Can be used with other job schedulers



eMARS Interface Approach

Interface Methods and Components

- System Maintenance Utility (SysManUtil)
 - Provides the following features for maintenance of table data
 - Import/Insert new records into a table from an XML file
 - Update existing records in a table, with or without edits
 - Overlay existing records in a table, with or without edits
 - Delete table records



eMARS Interface Approach

Interface Methods and Components

- System Maintenance Utility (SysManUtil)
 - Provides the following features for maintenance of documents
 - Import / Export documents from/to an XML file
 - Archive and Un-archive documents
 - Perform the Edit action on documents
 - Validate and Submit previously imported documents



eMARS Interface Approach

Interface Architecture

- Interface Requirements
- MARS Document Interface Architecture
- eMARS Document Interface Architecture



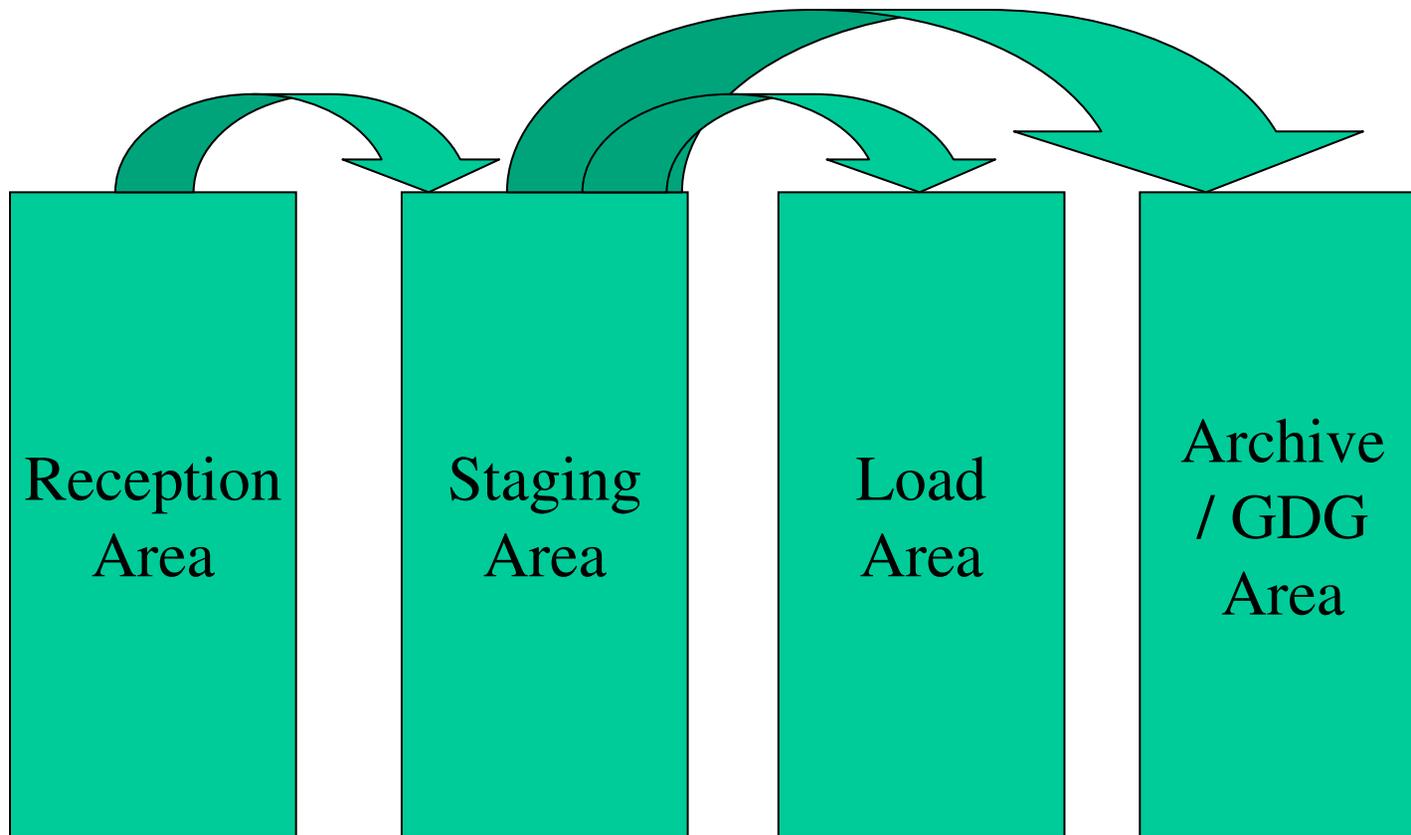
eMARS Interface Approach

Interface Requirements

- Process guarantee (once and only once)
- Enable replace capabilities
- Secure transmission
- Archive / Purge (5 generations)
- Minimal exposure of application server while providing ease of access to departments
- Nightly process cycle for all documents
- Check Writer input loaded on demand throughout day
- Data ownership and process constraints established in eMARS system must be enforced

eMARS Interface Approach

MARS Document Interface Architecture



eMARS Interface Approach

MARS Document Interface Architecture

- Agencies copy / FTP (non-encrypted) documents to designated files in reception area under RACF control on the z/OS system
 - FTP option to append or replace
- Nightly process (non-Check Writer):
 - Copy each file from the process staging to archive GDG
 - Copy each file from reception area to process staging area and initialize the reception area
 - Copy each file from the process staging to the load staging area
 - Run the Advantage 2 Load Operation
 - Purge Load Area

eMARS Interface Approach

eMARS Document Interface Process

- Agencies copy XML formatted interface file to agency NT server
- Upload interface file to eMARS and eMARS application server
 - Uses a secure (HTTPS) page within the application
 - Allows multiple uploads per day
- Nightly cycle performs backup of all unprocessed interface files
- Import (SysManUtil) documents from interface files to Advantage 3 Document Catalog
- Submit (SysManUtil) documents loaded to the Advantage 3 Document Catalog

eMARS Interface Approach

HTTPS Approach: Document Screen

Select	Rover Id	Create Timestamp	Department	Unit	Processed	Loaded By	Last Update Timestamp
<input checked="" type="checkbox"/>	CV001001	2005-07-01-10:00	Dept_01	01	N	F0001	
<input type="checkbox"/>	CV001002	2005-07-01-11:00	Dept_01	03	N	F0002	
<input type="checkbox"/>	CV001003	2005-07-01-11:10	Dept_02	04	N	F0003	
<input type="checkbox"/>	CV001001	2005-06-29-10:00	Dept_01	01	Y	F0001	2005-06-29-20:00
<input type="checkbox"/>	CV010010	2005-07-01-13:00	Dept_03	05	N	F0005	

Rover Id:

Department:

Unit:

File:

eMARS Interface Approach



eMARS Documents

- Agency Responsibilities
- eMARS Documents
 - Document Crosswalk
 - Interface Document ID Naming Convention
 - Required XML Components
 - Commodity based
 - Non-commodity based
- eMARS Inbound Interface Templates
- eMARS Outbound Interface Template
- eMARS Check Writer Template



eMARS Documents

Agency Responsibilities

- Review Interface Inventories in Interface Plan
 - Appendix A – Inbound Document Interfaces
 - Appendix B – Check Writer Interfaces
 - Appendix C – Outbound Interfaces
 - Appendix D – Inbound Table Interfaces
- Produce input files in an XML format for document based inbound interfaces to be loaded to the Advantage 3 Document Catalog
- Produce input files in an XML format for inbound table interfaces and Check Writer Interfaces to be loaded to the Advantage 3 tables
- Design, development, and unit testing of inbound, outbound, and Check Writer interfaces and ongoing support of programs

eMARS Documents

Functionality	eMARS Document	MARS Document
Record receipt of electronic deposit	Cash receipt (CR) document with payment type field set to "EFT" value	Cash Receipt of electronic deposit (C1)
Record receipt of cash	Cash Receipt (CR)	Cash Receipt (CR)
Record Management Budget and Budgetary Control	OB1 - Clone of Charge (CH) document	Obligation Budget (OB) Revenue Recognition (RR)
Record modification to fixed asset	Fixed Asset Modification (FM) for description changes Fixed Asset Increase/Decrease (FI) for cost changes	Fixed Asset Modification (FC)
Record acquisition of fixed asset	Fixed Asset (FA) document (event type FA01)	Fixed Asset (FA)
Record betterment of fixed asset	Fixed asset (FA) document (event type FA02)	Fixed Asset Betterment (FB)
Internal Voucher for Travel Expense	Internal Exchange Transaction (IET)	Internal Travel Voucher (IIT)

eMARS Documents

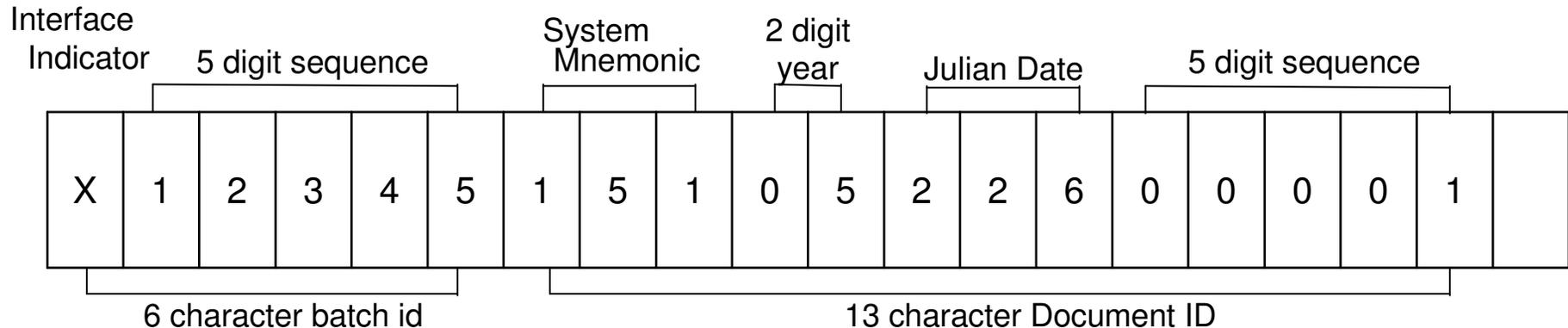
Functionality	eMARS Document	MARS Document
Correct previously posted expenditure or revenue transactions (no vendor code)	Cost Allocation (CA)	Journal Voucher Correction (JVC or JVB (BFY allowed))
Correct previously posted expenditure or revenue transactions document (with vendor code)	Cash Expenditure Correction (CEXP) – clone of the General Accounting Expense/Expenditure (GAX) document	Journal Voucher Correction (JVC or JVB (BFY allowed))
Record accounting transactions that cannot be recorded using any other document	Cost Allocation (CA)	Journal Voucher Master (JVM)
Record all cash transfers	Cost Allocation (CA)	Journal Voucher Transfer (JVT)
Record manually written checks or warrants	Manual Disbursement (MD)	Manual Warrant (MW)
Record contract employee checks or warrants from UPPS	Payment Request Commodity (PRC)	Manual Warrant (MW)
Record manually created fed wires for purchase of investment securities	Manual Disbursement (MD)	Manual Warrant/Investment (MWI)

eMARS Documents

Functionality	eMARS Document	MARS Document
Authorize payment to vendors	General Accounting Expense/Expenditure (GAX). For CPES interface from the Transportation Cabinet, the replacement document will be Payment Request Commodity (PRC)	Vendor payment voucher (P1) Payment Voucher type 1 (PV1)
Records an order for goods or services and encumbers funds for payment. Only used by Transportation CPES system interface	Purchase Order (PO)	Purchase Order (PO)
Transfer money within entity-automatically generated only	Internal Exchange Transaction (IET)	Payment Voucher – Interface (PVI)
Maintenance and synchronization of vendor information from UPPS system and Medicaid system	VCC/VCM	Files containing vendor data from UPPS and Medicaid systems are sent via FTP to the mainframe and compared with data files extracted from Advantage 2 and Procurement Desktop.

eMARS Documents

Interface Document ID Naming Conventions



- **Batch ID**
 - **Interface Indicator** - “X” = Interface
 - **5 Digit Sequence** – Current MARS Batch ID
- **Document ID**
 - **System Mnemonic** - 3 character source system identifier; Use MARS Rover number
 - **2 Digit Year** – Calendar Year
 - **Julian Date** – Julian Calendar Day of Year
 - **5 Digit Sequence** – Use to distinguish between multiple files on the same day

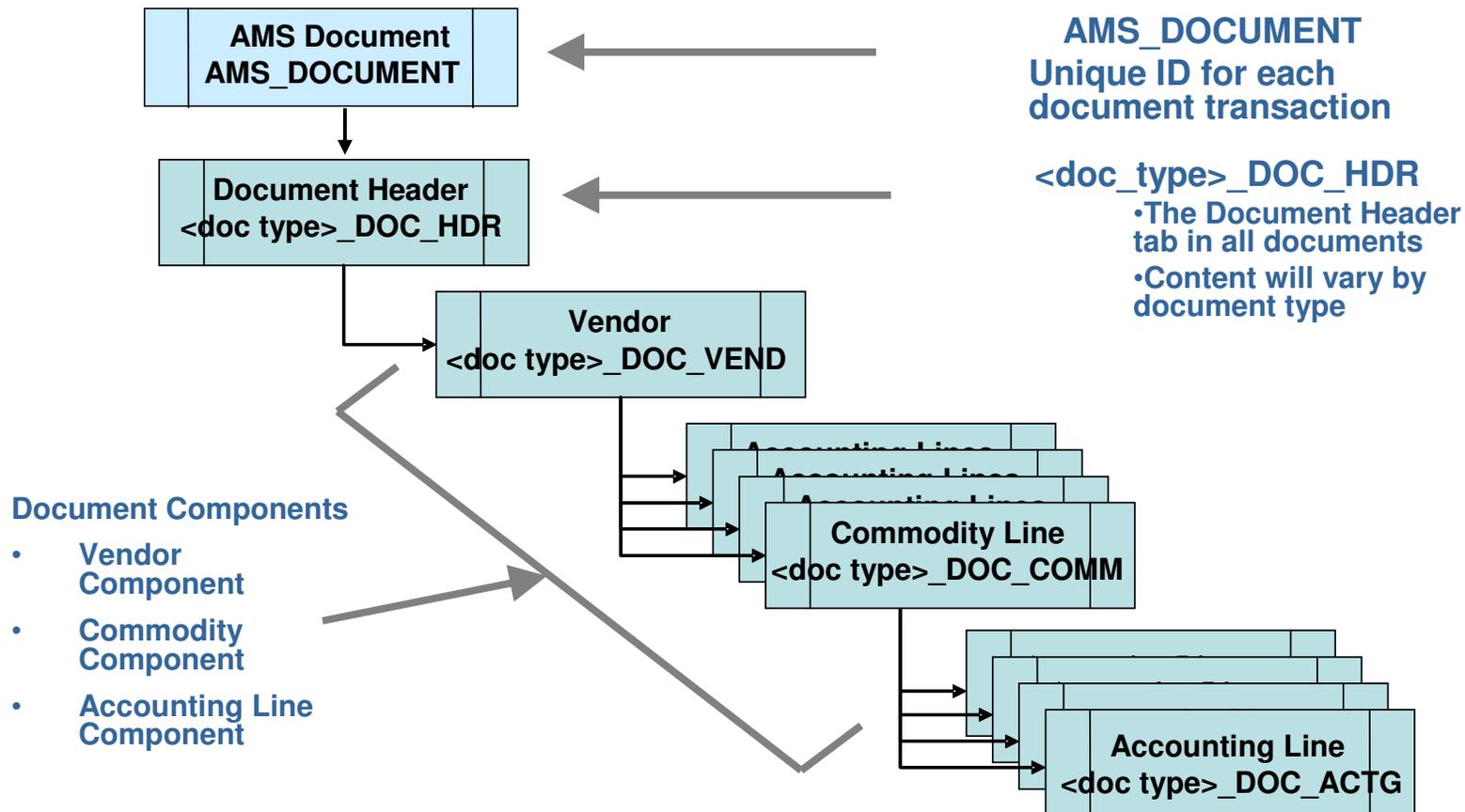
eMARS Documents

Required XML Components

- AMS_DOC_XML_IMPORT_FILE
 - Unique Tag used to identify the beginning of an inbound XML interface transaction
 - Always the first entry in the file
- AMS_DOCUMENT
 - Unique ID for each document transaction
- <doc type>_DOC_HDR
 - The Document Header tab in all documents
 - Content will vary by document type

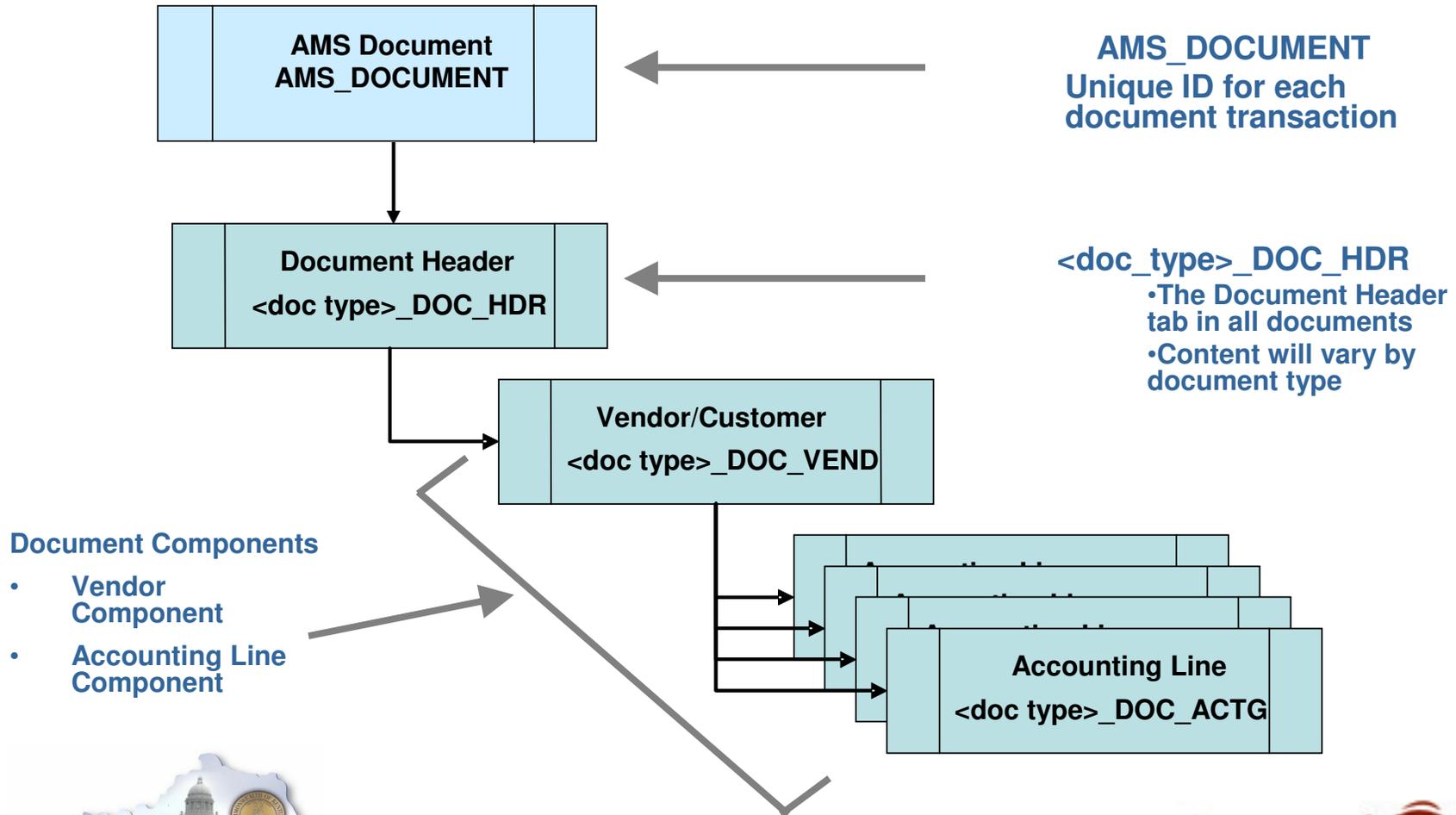
eMARS Documents

Commodity based



eMARS Documents

Non-Commodity



eMARS Documents

Payment Request (PRC) Document Header Tab

AMS Document
AMS_DOCUMENT

Document Header
<doc type>_DOC_HDR

Vendor
<doc type>_DOC_VEND

Commodity Line
<doc type>_DOC_COMM

Accounting Line
<doc type>_DOC_ACTG

The screenshot displays the AMS ADVANTAGE interface for a Payment Request (PRC) document. The breadcrumb trail at the top shows the document ID 'PRC - 095-05000177-1-New-Final' circled in red. The left-hand navigation menu has 'Header' selected, which is also highlighted with a red box. The main content area shows the 'General Information' tab, containing fields for Document Name, Record Date (08/23/2005), Budget FY (2006), Fiscal Year (2006), Period (2), Bank Account, Accounting Profile, Replacement, P-Card Payment, P-Card Administrator, Cited Authority, and Document Description. On the right side, a summary of financial amounts is displayed, including Actual Amount (\$100.00), Retainage Amount (\$0.00), Discount Amount (\$0.00), Penalty/Interest Amount (\$0.00), Withheld Amount (\$0.00), Intercept Amount (\$0.00), Use Tax Withheld (\$0.00), Default Intercept Fee Amount (\$0.00), Supplementary Intercept Fee Amount (\$0.00), Payment Amount (\$100.00), Outstanding Amount (\$0.00), Closed Amount (\$100.00), and Closed Date (08/23/2005). At the bottom, there are buttons for Edit, Print, Copy Forward, and Close.

eMARS Documents

Payment Request (PRC) Document Vendor Tab

AMS Document
AMS_DOCUMENT

Document Header
<doc type>_DOC_HDR

Vendor
<doc type>_DOC_VEND

Commodity Line
<doc type>_DOC_COMM

Accounting Line
<doc type>_DOC_ACTG

The screenshot displays the 'AMS ADVANTAGE' system interface. At the top, it shows 'Welcome, randy keltner' and navigation links for 'Procurement', 'Budgeting', 'Accounts Receivable', and 'Accounts Payable'. The main content area is titled 'PRC - 095-05000177-1- New- Final' and includes an 'Action Menu'.

A table lists vendor lines with columns for 'Vendor Line', 'Vendor Customer', 'Legal Name', and 'Line Amount'. The first line is highlighted in yellow:

Vendor Line	Vendor Customer	Legal Name	Line Amount
1	VC0000100014	SNAPP'S JANITORIAL	100.00

Below the table, there is a 'General Information' section for the selected vendor. The fields are as follows:

- Vendor Customer: VC0000100014
- Vendor Contact ID: PC001
- Legal Name: SNAPP'S JANITORIAL
- Vendor Contact Name: Teresa snapp
- Alias/DBA: Teresa Snapp
- Vendor Contact Phone: 573 6806
- Address Code: AD001
- Vendor Contact Phone Ext.: 3471
- Address 1: 492 cherry hill
- Vendor Contact Email:
- Address 2:
- Fax:
- City: versailles
- Fax Extension:
- State: Kentucky
- Web Address http://:
- Zip Code: 40383
- Taxpayer ID Number:
- Country: US
- Taxpayer ID Type:
- County:
- Merchant ID:
- Tax Profile:
- Received Service From Date:
- Received Service To Date:

A 'Disbursement Options' section is partially visible at the bottom.

eMARS Documents

Payment Request (PRC) Document Commodity Line

AMS Document
AMS_DOCUMENT

Document Header
<doc type>_DOC_HDR

Vendor
<doc type>_DOC_VEND

Commodity Line
<doc type>_DOC_COMM

Accounting Line
<doc type>_DOC_ACTG

The screenshot displays the AMS ADVANTAGE interface for a Payment Request (PRC) document. The document ID is PRC - 095-05000177-1 - New- Final. The commodity line table shows one line with the following details:

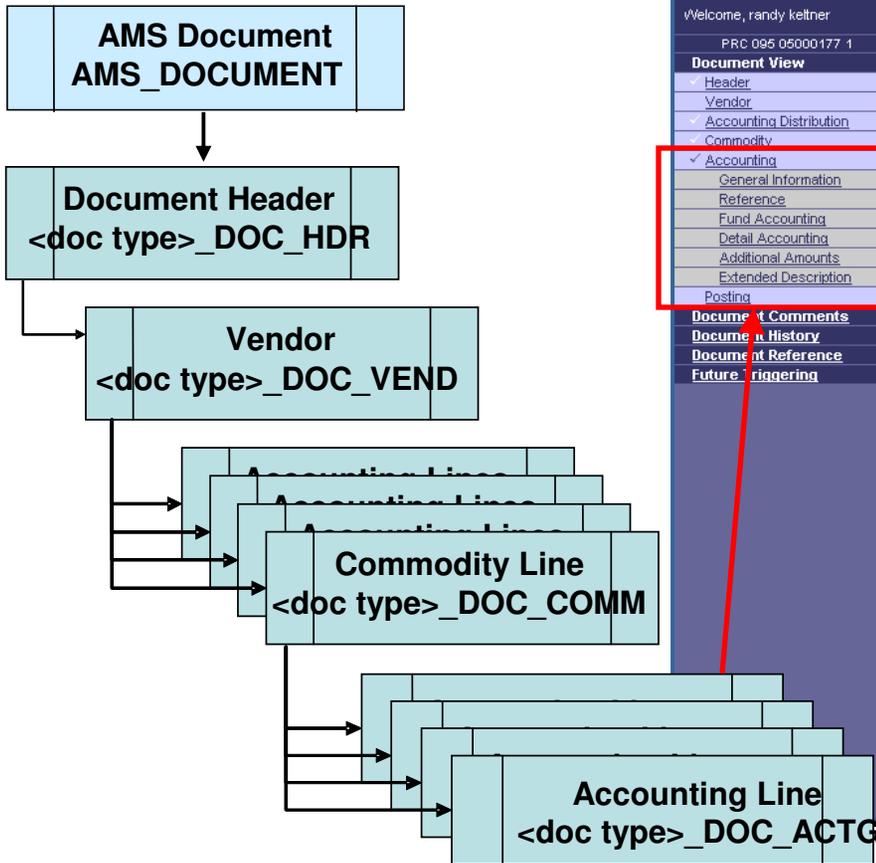
Commodity Line	CL Description	Commodity	Quantity	Line Type
1	delete cited auth test	10006	10.00000	Item

The 'General Information' section for the selected commodity line includes the following fields:

- CL Description: delete cited auth test
- Commodity: 10006
- Stock Item Suffix: Universal Widget
- Description: (empty)
- Line Type: Item
- Quantity: 10.00000
- Unit of Measure: EA
- Unit Price: \$10.00
- Discount Unit Price: \$10.00
- Contract Amount: \$0.00
- Received Service From Date: 08/23/2005
- Received Service To Date: 08/23/2005
- Accounting Profile: (empty)
- Tax Profile: (empty)
- Procurement Card: (empty)
- P-Card Expiration Date: (empty)
- Account Number: (empty)
- Reconciliation Sequence: (empty)
- Reconciliation Status: (empty)
- Receipt Date: (empty)
- Comments: (empty)

eMARS Documents

Payment Request (PRC) Document Accounting Line



AMS ADVANTAGE

Welcome, randy keltner

Procurement Budgeting Accounts Receivable Accounts Payable

PRC 095 05000177 1

PRC - 095- 05000177- 1- New- Final

Action Menu

Accounting

Accounting Line	Total Line Amount	Line Closed Amount	Outstanding Amount
1	\$50.00	\$50.00	\$0.00
2	\$40.00	\$40.00	\$0.00
3	\$10.00	\$10.00	\$0.00

Insert New Line Insert Copied Line

Use the Accounting Template for Accounting strip details

Accounting Template: SNAPP1

Event Type: AP01

Budget FY: 2006

Fiscal Year: 2006

Period: 2

Line Description:

Sub Total Line Amount: \$50.00

Tax Amount: \$0.00

Use Tax Amount: \$0.00

Total Line Amount: \$50.00

Check Description:

Special Instructions Code:

Disbursement Category:

Reference

Fund Accounting

Fund: 0100

Object: E321

OBSA:

Sub Fund:

Sub Object:

Sub OBSA:

Department: 095

Revenue:

Dept Object:

eMARS Documents



eMARS Interface Templates

- Inbound Interface Templates
 - Internal Exchange Transaction (IET) Document
- Outbound Interface Templates
 - Vendor Intercepts



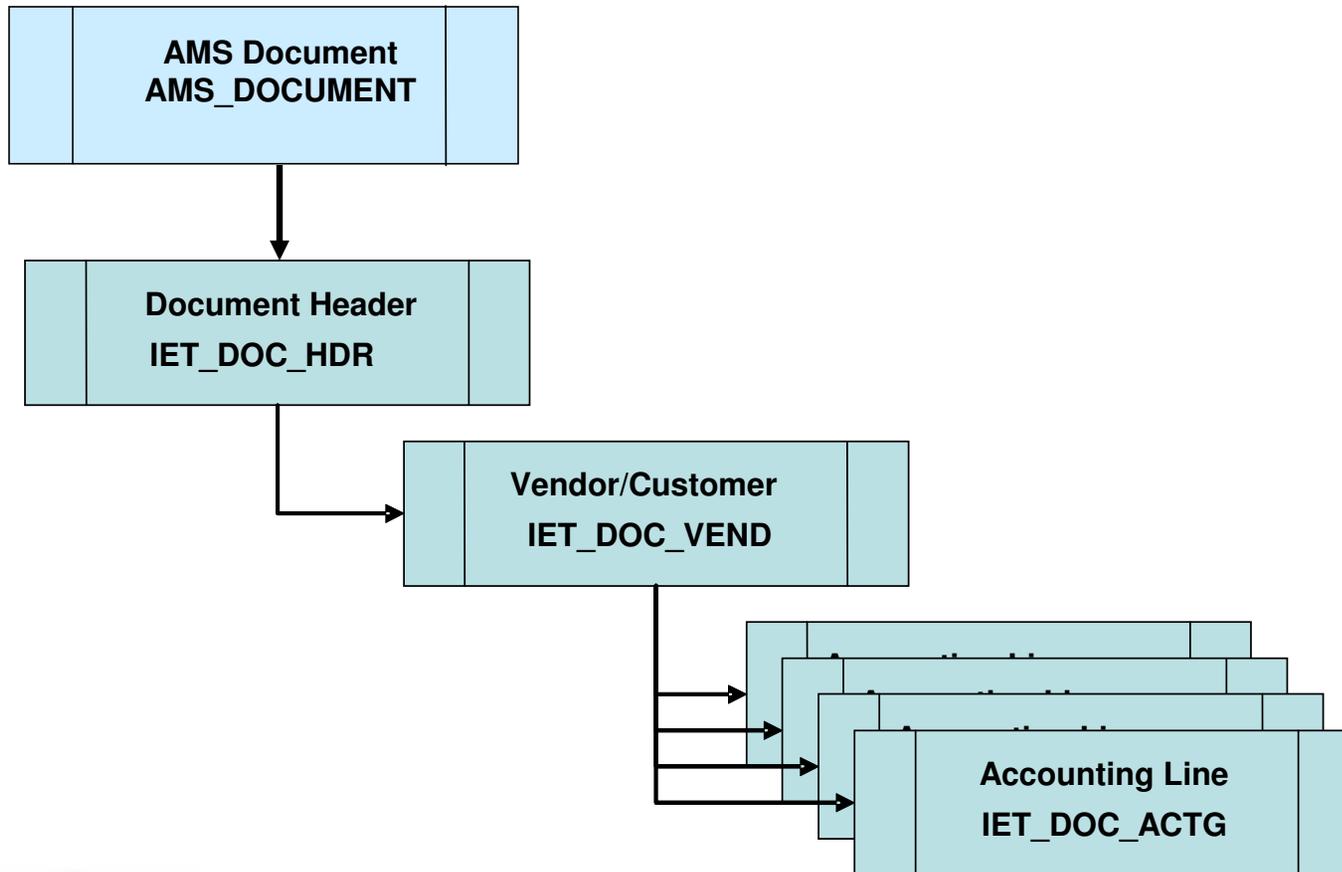
eMARS Inbound Interface Template

- XML tag – XML field name
- Caption – Name of field
- Description of the field
- R/C – Required or Conditional / Optional
- Type – Data Characteristics
 - Text/Numeric
 - Date
 - Varchar2
- Maximum Size
- eMARS Comments
 - Default values
 - Conditional values



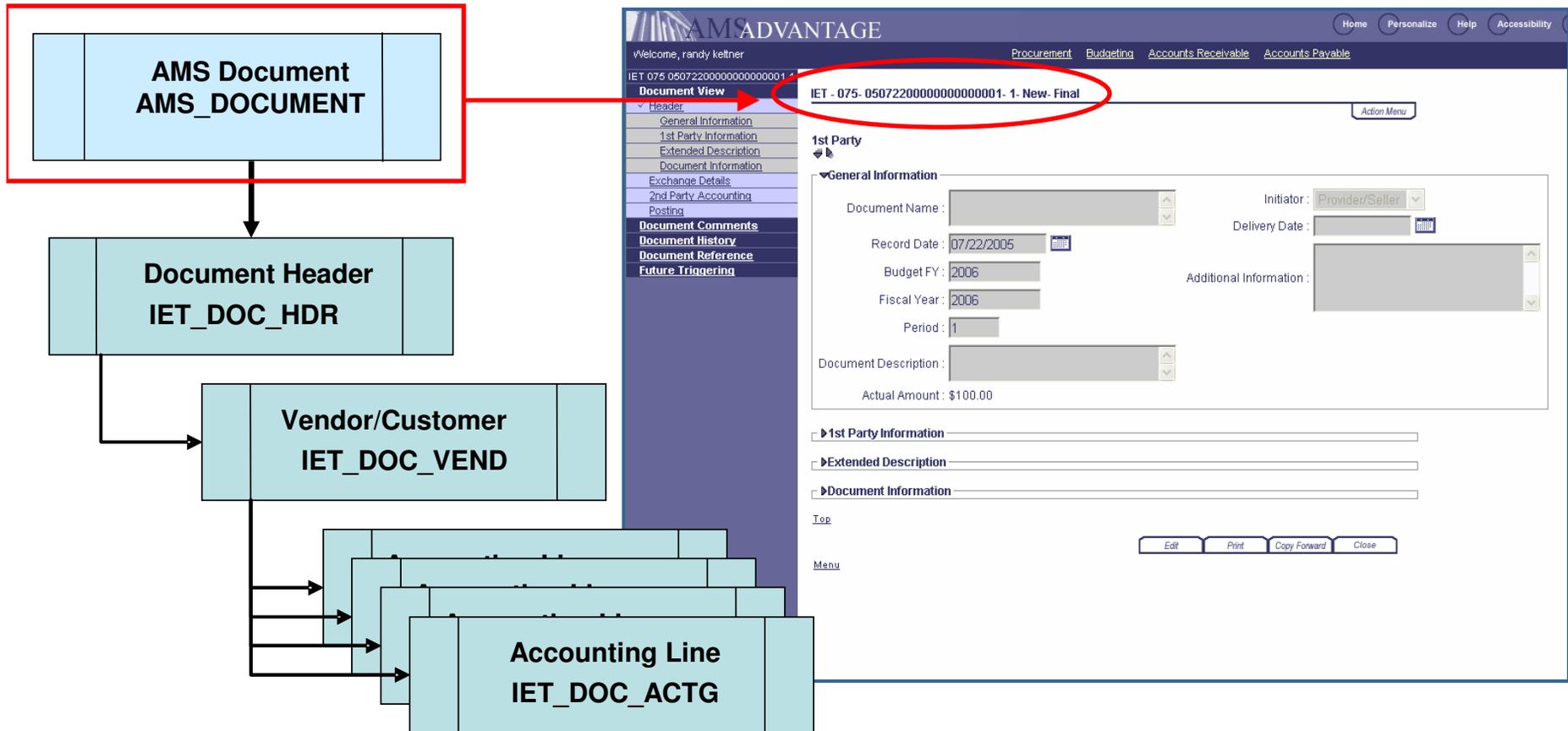
eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document



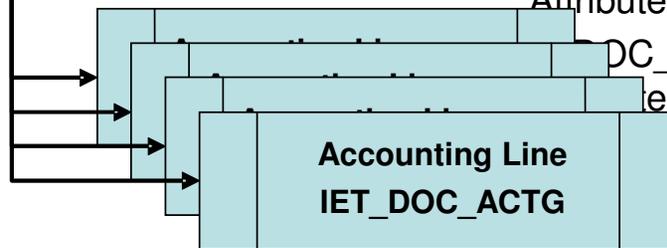
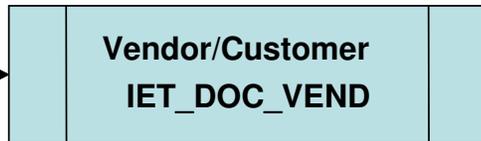
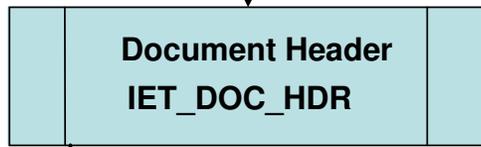
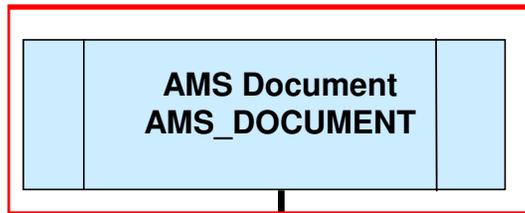
eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document



eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document

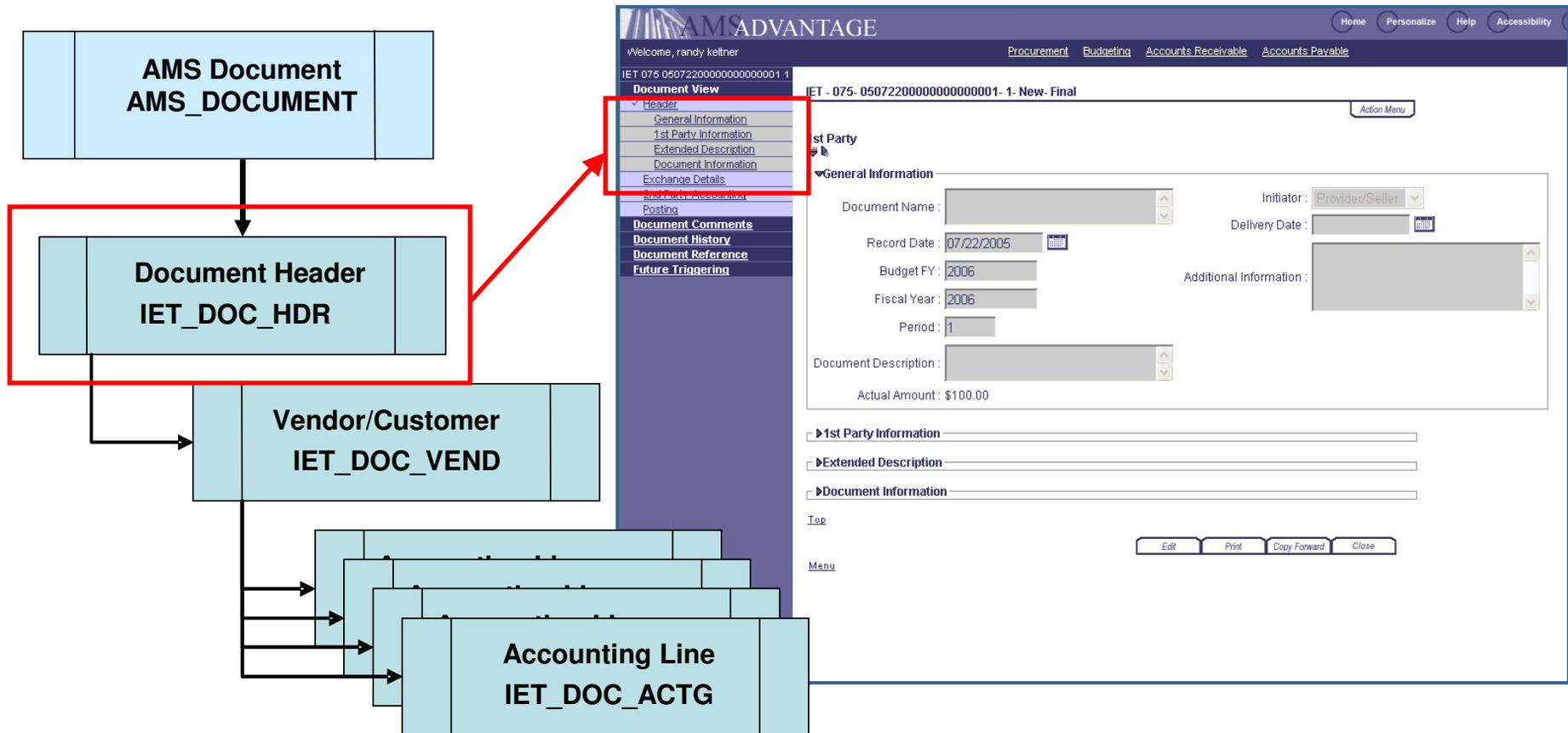


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    AUTO_DOC_NUM="false" DOC_IMPORT_MODE="OE">
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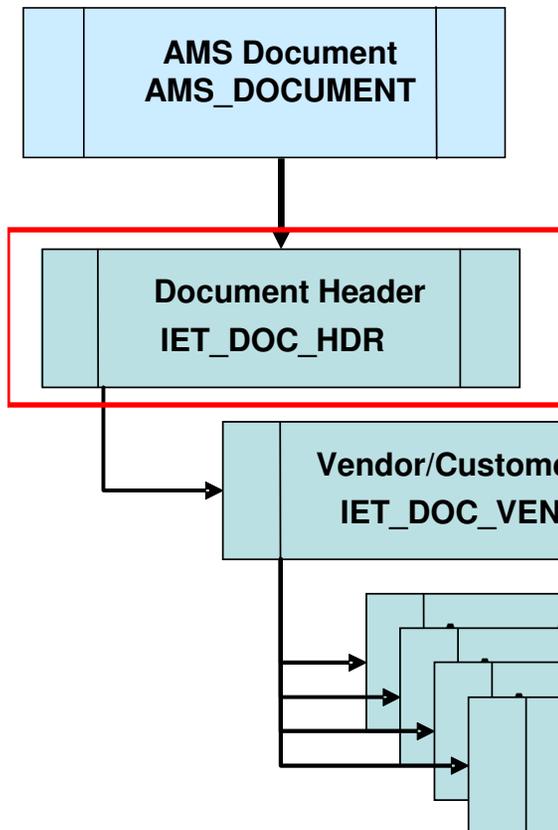
eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document



eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document

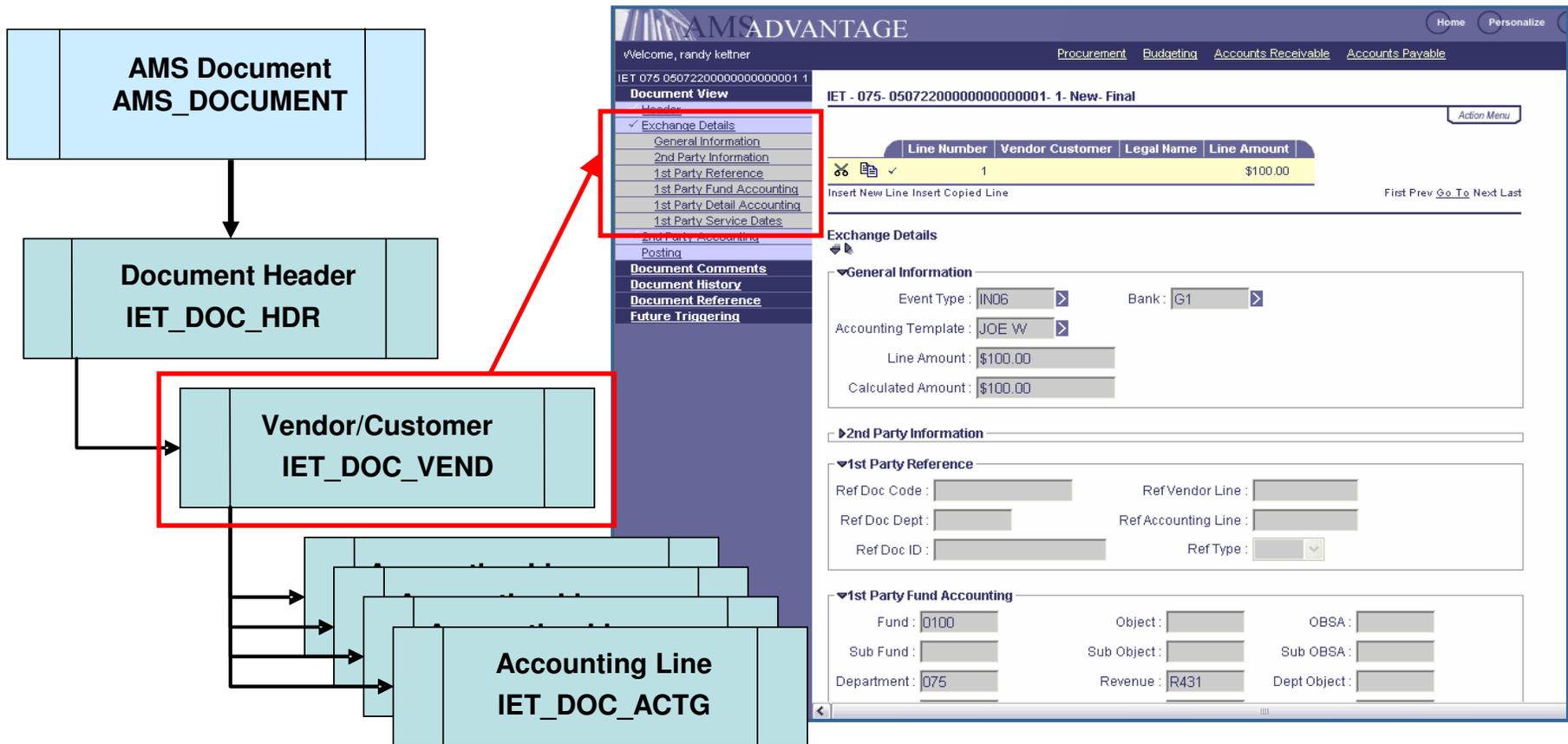


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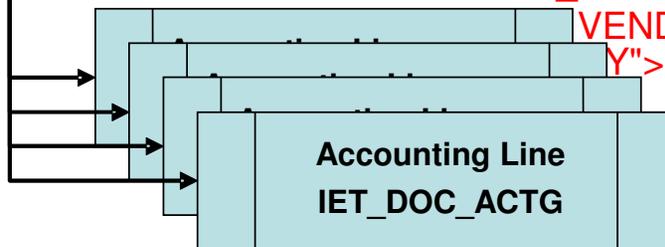
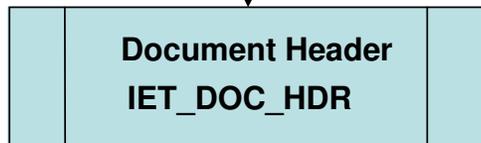
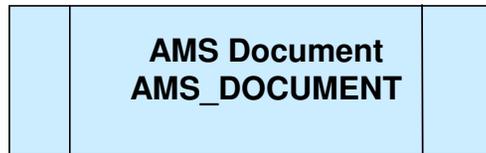
eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document



eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document



```

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eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document

AMS Document
AMS_DOCUMENT

Document Header
IET_DOC_HDR

Vendor/Customer
IET_DOC_VEND

Accounting Line
IET_DOC_ACTG

AMS ADVANTAGE

Welcome, randy keltner

Procurement Budgeting Accounts Receivable Accounts Payable

IET 075-05072200000000000001-1

Document View

- Header
- Exchange Details
- 2nd Party Accounting
- General Information
- References
- Fund Accounting
- Detail Accounting
- Service Dates
- Posting

IET - 075- 05072200000000000001- 1- New- Final

Accounting Summary

Line Number	Line Amount	Event Type
1	\$100.00	INOC

Use the Accounting Template for Accounting strip details

Accounting Template: ERIC T

2nd Party Accounting

General Information

Event Type: INOC

Accounting Template: ERIC T

Line Description:

Line Amount: \$100.00

Budget FY: 2006

Fiscal Year: 2006

Period: 1

Bank: G1

Billing Profile:

References

Fund Accounting

Fund: 0100 Object: E321 OBSA:

Sub Fund: Sub Object: Sub OBSA:

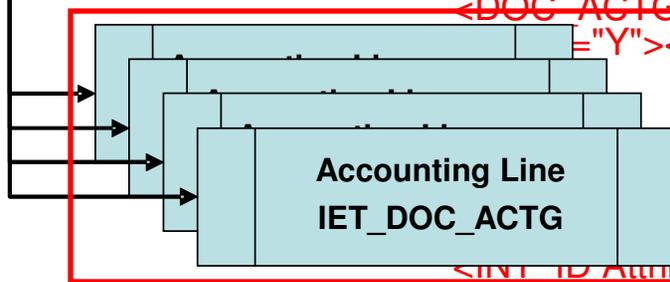
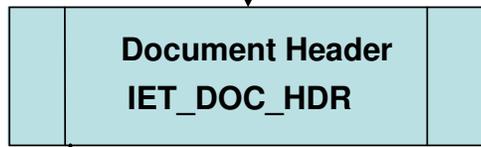
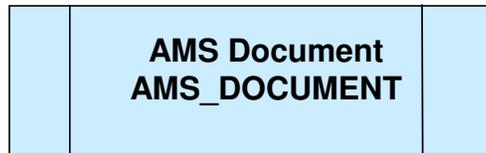
Department: 850 Revenue: Dept Object:

Unit: UNIT Sub Revenue: Dept Revenue:

Sub Unit: BSA:

eMARS Inbound Interface Templates

Internal Exchange Transaction (IET) Document



```

<INT_DT Attribute="Y"><![CDATA[null]]></INT_DT>
</IET_DOC_VEND>
<IET_DOC_ACTG AMSDataObject="Y">
  <DOC_COMP_MOD_FL
  Attribute="Y"><![CDATA[0]]></DOC_COMP_MOD_FL>
  <DOC_CAT Attribute="Y"><![CDATA[IET]]></DOC_CAT>
  <DOC_TYP Attribute="Y"><![CDATA[IET]]></DOC_TYP>
  <DOC_CD Attribute="Y"><![CDATA[IET]]></DOC_CD>
  <DOC_DEPT_CD Attribute="Y"><![CDATA[075]]></DOC_DEPT_CD>
  <DOC_ID
  Attribute="Y"><![CDATA[05072200000000000001]]></DOC_ID>
  <DOC_VERS_NO Attribute="Y"><![CDATA[1]]></DOC_VERS_NO>
  <DOC_ACTG_NO Attribute="Y"><![CDATA[66]]></DOC_ACTG_NO>
  <DOC_ACTG_LN_NO
  Attribute="Y"><![CDATA[1]]></DOC_ACTG_LN_NO>
  .
  .
  <INT_FEE_CD Attribute="Y"><![CDATA[null]]></INT_FEE_CD>
  <INT_ID Attribute="Y"><![CDATA[null]]></INT_ID>
  <INT_DT Attribute="Y"><![CDATA[null]]></INT_DT>
</IET_DOC_ACTG>
  
```

eMARS Inbound Interface Templates



eMARS Outbound Interface Templates

Outbound Interfaces Approach

- Agency develops infoAdvantage extract query from data warehouse to select required data
 - Data is loaded to agency applications for agency use
- Reference Data (e.g. COA tables)
 - Direct views to the databases may be created for extract purposes
 - Reviewed on a case by case basis by the Office of the Controller
- Transactional Data (e.g. intercept activity and payment information)
 - Allows for 'From / To Date' and 'As of Date' extracts



eMARS Outbound Interface Templates

Vendor Intercept Template

MARS Advantage 2			eMARS InfoAdvantage				
Field Name	Data Type	Data Size	Object Name	Sub-Class Name	Data Type	Data Size	Field Description
AGENCY	Alphanumeric	3	Claim Department	Intercept Activity	Alphanumeric	4	The value refers to a document department code of either referenced receivable document for an internal debt record, or provided on the Receivable Document Department Code for an external debt record. The value of this field will be similar to the one on the Receivable Document Department Code.
CLAIM-REASON	Alphanumeric	3	Debt Entity	Debt Entity	Alphanumeric	4	The unique identification of the entity for which the debt was owed.
CLAIM-REASON	Alphanumeric	3	Debt Type	Debt Entity	Alphanumeric	4	The unique identification code of the type of debt for which the debt was owed.

eMARS Outbound Interface Templates



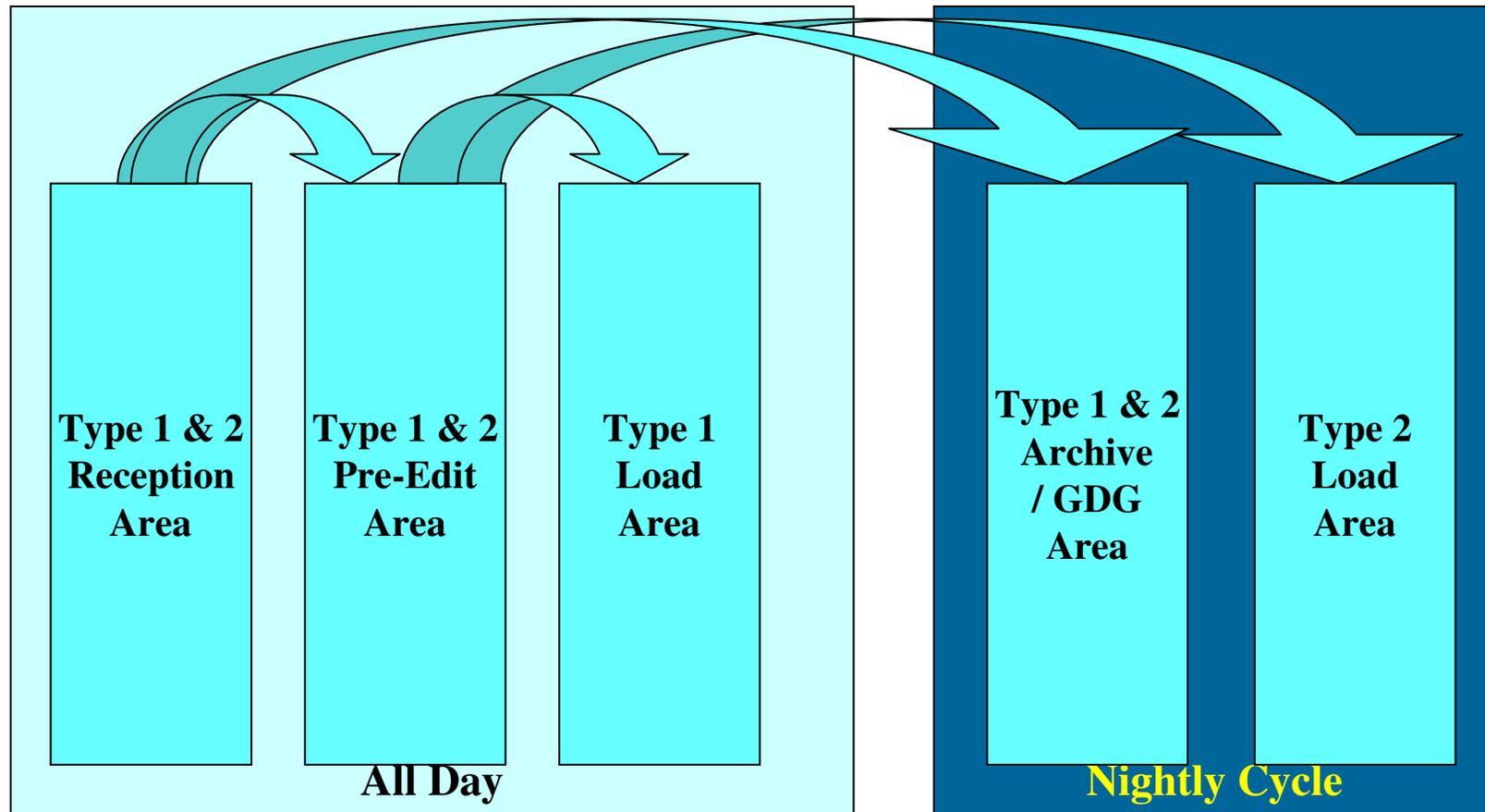
eMARS Check Writer Template

- Check Writer Process (MARS vs eMARS)
- Check Writer Component Structure
- Check Writer File ID Naming Convention
- Check Writer Sample Input XML File



eMARS Check Writer Template

MARS Check Writer Process



eMARS Check Writer Template

MARS Check Writer Process

- Agencies copy / FTP (non-encrypted) check writer (types 1 and 2) to designated files in reception area under RACF control on the z/OS system
 - FTP option to replace
 - Run pre-edit job to validate the file (optional)
 - Agency authorized user sends e-mail requesting file be processed



eMARS Check Writer Template

MARS Check Writer Process

- Day time process (manual)
 - Load and process type 1 check writer files that passed edits
 - **Must** override budget and cash controls
 - **No** Vendor Intercepts allowed
- Nightly cycle:
 - Copy each type 1 and 2 check writer file from the reception area to archive GDG;
 - Load and process type 2 check writer files that passed edits
 - **May** override Budget and Cash controls
 - Vendor Intercepts **allowed**

eMARS Check Writer Template

eMARS Check Writer Process

- Agency copies XML formatted check writer file to agency NT server
- Upload Check Writer into Advantage 3 and eMARS application server
 - Uses a secure (HTTPS) page within the application
- Authorized agency administrator uses Job Manager to submit Check Writer preprocessing jobs
 - Submits job to update Check Writer tables
 - Submits pre-edit job
 - Submits “cleanup” job if errors exist
- Agency authorized user certifies Check Writer file for processing



eMARS Check Writer Template

eMARS Check Writer Process

- Office of the Controller
 - Certifies Check Writer file for processing
 - Controls Budget overrides
 - Controls Cash overrides
 - Controls Vendor Intercepts



eMARS Check Writer Template

eMARS Check Writer Process

HTTPS Approach: CW Screen

Select	Rover Id	Create Timestamp	Department	Unit	Loaded By
<input checked="" type="checkbox"/>	CW001	2005-07-01-10:00	Dept_01	01	F0001
<input checked="" type="checkbox"/>	CW002	2005-07-01-11:00	Dept_01	03	F0002
<input type="checkbox"/>	CW003	2005-07-01-11:10	Dept_02	04	F0003
<input type="checkbox"/>	CW001	2005-06-29-10:00	Dept_01	01	F0001
<input type="checkbox"/>	CW005	2005-07-01-13:00	Dept_03	05	F0005

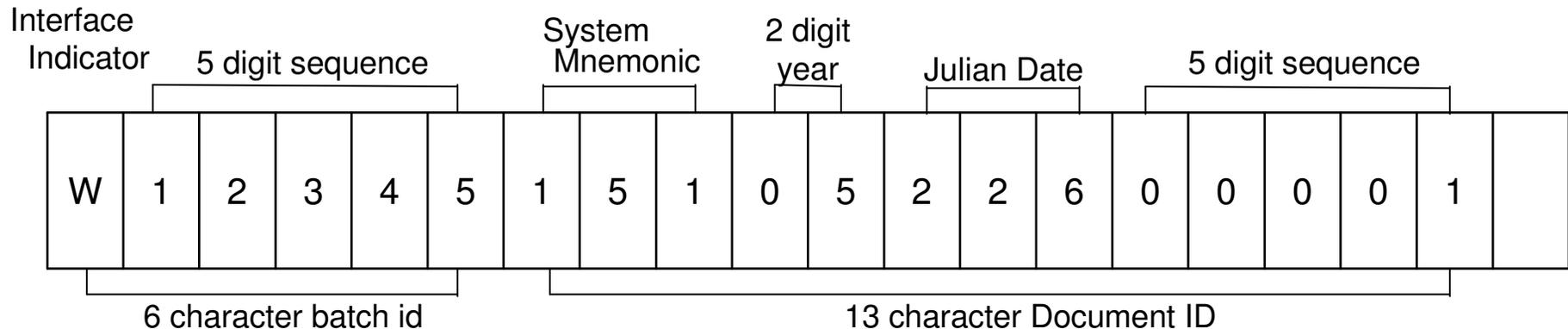
Department:

Unit:

File:

eMARS Check Writer Template

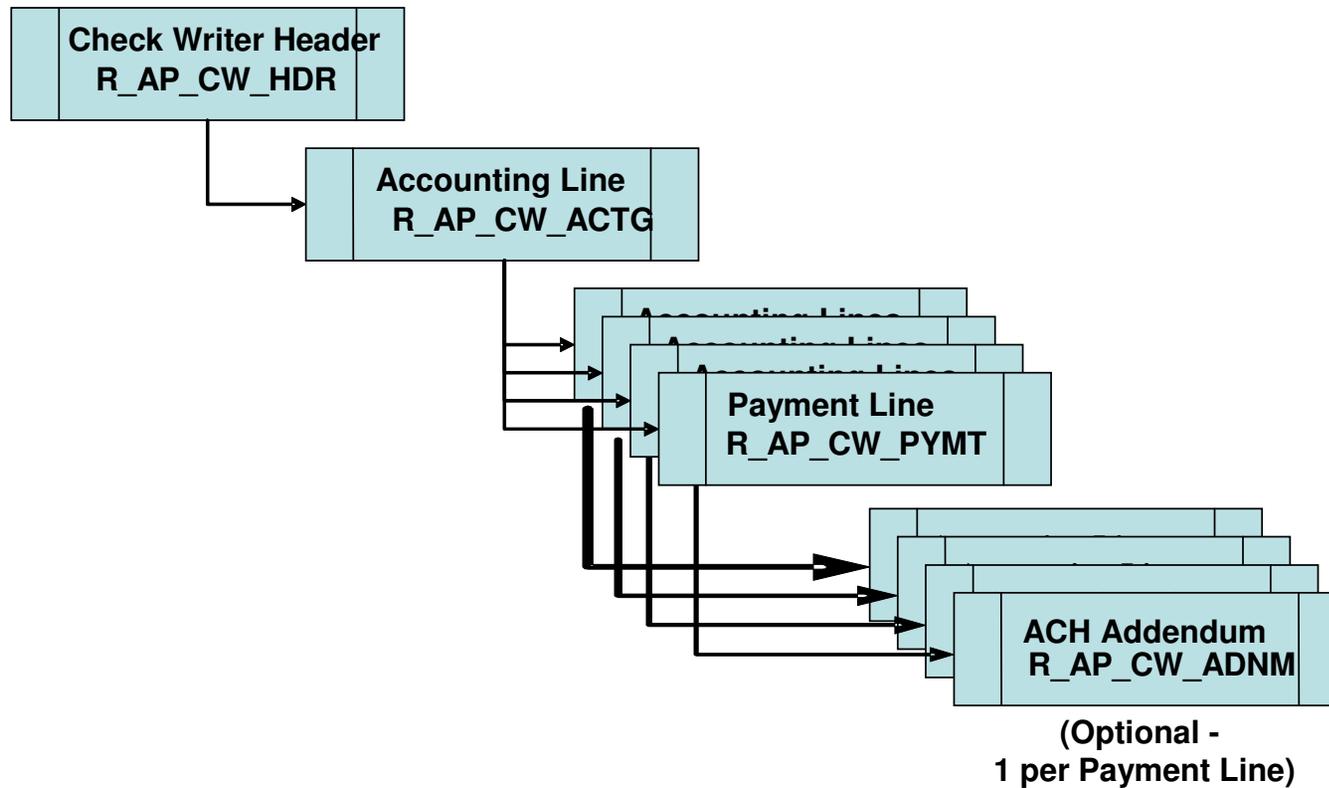
Check Writer File ID Naming Convention



- **Batch ID**
 - **Interface Indicator** - “W” = Check Writer
 - **5 Digit Sequence** – Agency supplied and maintained
- **Document ID**
 - **System Mnemonic** - 3 character source system identifier; Use MARS Rover number
 - **2 Digit Year** – Calendar Year
 - **Julian Date** – Julian Calendar Day of Year
 - **5 Digit Sequence** – Use to distinguish between multiple files on the same day

eMARS Check Writer Template

eMARS Check Writer Component Structure



eMARS Check Writer Template

Check Writer Sample Input XML File

Header Component

Start Header Line Component

End Header Line Component

```
<AMS_DATAOBJECT_XML_IMPORT_FILE >  
  < R_AP_CW_HDR AMSDataObject = "Y" >  
    <CW_DEPT_CD Attribute="Y"><![CDATA[500]]></CW_DEPT_CD>  
    <CW_UNIT_CD Attribute="Y"><![CDATA[1234]]></CW_UNIT_CD>  
    <CW_FILE_ID Attribute="Y"><![CDATA[123456789]]></CW_FILE_ID>  
    <BANK_ACCT_CD Attribute="Y"><![CDATA[G1]]></BANK_ACCT_CD>  
    <PYMT_DSCR Attribute="Y"><![CDATA[FOOD STAMP  
EMPLOYEE]]></PYMT_DSCR>  
    <BFY Attribute="Y"><![CDATA[2005]]></BFY>  
    <FY Attribute="Y"><![CDATA[2005]]></FY>  
    <PER Attribute="Y"><![CDATA[6]]></PER>  
    <PYMT_DT Attribute="Y"><![CDATA[2005-09-10]]></PYMT_DT>  
    <EFT_FRMT Attribute="Y"><![CDATA[CCD]]></EFT_FRMT>  
    <CHK_FRMT Attribute="Y"><![CDATA[REG]]></CHK_FRMT>  
    <DISB_CAT Attribute="Y"><![CDATA[GA]]></DISB_CAT>  
    <DISB_HDLG_CD Attribute="Y"><![CDATA[TRHDI]]></DISB_HDLG_CD>  
    <CNTAC_CD Attribute="Y"><![CDATA[5555]]></CNTAC_CD>  
    <TOT_PYMT_AM Attribute="Y"><![CDATA[5000.00]]></TOT_PYMT_AM>  
    <TOT_ACTG_LN Attribute="Y"><![CDATA[2]]></TOT_ACTG_LN>  
    <TOT_PYMT_LN Attribute="Y"><![CDATA[4]]></TOT_PYMT_LN>  
  </R_AP_CW_HDR>
```

eMARS Check Writer Template

Check Writer Sample Input XML File

Accounting Line Component

Start Accounting Line Component

```
<R_AP_CW_ACTG AMSDataObject = "Y">
  <LN_NO Attribute="Y"><![CDATA[1]]></LN_NO>
  <BFY Attribute="Y"><![CDATA[2005]]></BFY>
  <FY Attribute="Y"><![CDATA[2005]]></FY>
  <PER Attribute="Y"><![CDATA[6]]></PER>
  <ACTG_TMPL_ID Attribute="Y"><![CDATA[TEST1]]></ACTG_TMPL_ID>
  <EVNT_TYP Attribute="Y"><![CDATA[EV01]]></EVNT_TYP >
  <FUND_CD Attribute="Y"><![CDATA[1200]]></FUND_CD>
  <SFUND_CD Attribute="Y"><![CDATA[null]]></SFUND_CD>
  <DEPT_CD Attribute="Y"><![CDATA[500]]></DEPT_CD>
  <UNIT_CD Attribute="Y"><![CDATA[UNIT]]></UNIT_CD>
  <SUNIT_CD Attribute="Y"><![CDATA[null]]></SUNIT_CD>
  <APPR_CD Attribute="Y"><![CDATA[AAAA]]></APPR_CD>
  <OBJ_CD Attribute="Y"><![CDATA[E119]]></OBJ_CD>
  <SOBJ_CD Attribute="Y"><![CDATA[null]]></SOBJ_CD>
  <RSRC_CD Attribute="Y"><![CDATA[null]]></RSRC_CD>
  <SRSRC_CD Attribute="Y"><![CDATA[null]]></SRSRC_CD>
  <DOBJ_CD Attribute="Y"><![CDATA[null]]></DOBJ_CD>
  <DRSRC_CD Attribute="Y"><![CDATA[null]]></DRSRC_CD>
  <ACTV_CD Attribute="Y"><![CDATA[null]]></ACTV_CD>
  <SACTV_CD Attribute="Y"><![CDATA[null]]></SACTV_CD>
```

eMARS Check Writer Template

Check Writer Sample Input XML File

Accounting Line Component

End Header Line Component

```
<SACTV_CD Attribute="Y"><CDATA[null]></SACTV_CD>  
<FUNC_CD Attribute="Y"><CDATA[null]></FUNC_CD>  
<SFUNC_CD Attribute="Y"><CDATA[null]></SFUNCT_CD>  
<BSA_CD Attribute="Y"><CDATA[null]></BSA_CD>  
<SBSA_CD Attribute="Y"><CDATA[null]></SBSA_CD>  
<RPT_CD Attribute="Y"><CDATA[null]></RPT_CD>  
<SRPT_CD Attribute="Y"><CDATA[null]></SRPT_CD>  
<LOC_CD Attribute="Y"><CDATA[null]></LOC_CD>  
<SLOC_CD Attribute="Y"><CDATA[null]></SLOC_CD>  
<TASK_CD Attribute="Y"><CDATA[null]></TASK_CD>  
<STASK_CD Attribute="Y"><CDATA[null]></STASK_CD>  
<TASK_ORD_CD Attribute="Y"><CDATA[null]></TASK_ORD_CD>  
<PROG_CD Attribute="Y"><CDATA[null]></PROG_CD>  
<PHASE_CD Attribute="Y"><CDATA[null]></PHASE_CD>  
<PPC_CD Attribute="Y"><CDATA[null]></PPC_CD>  
<LN_AM Attribute="Y"><CDATA[2000.00]></LN_AM>  
</R_AP_CW_ACTG>
```

eMARS Check Writer Template

Check Writer Sample Input XML File

Payment Line Component

Start Payment Line Component

```
<R_AP_CW_PYMT AMSDataObject = "Y">  
  <LN_NO Attribute="Y"><![CDATA[1]]></LN_NO>  
  <VEND_CUST_CD Attribute="Y"><![CDATA[NON-MISC EFT  
  VEND]]></VEND_CUST_CD>  
  <LGL_NM Attribute="Y"><![CDATA[null]]></LGL_NM>  
  <ALIAS_NM Attribute="Y"><![CDATA[null]]></ALIAS_NM>  
  <TIN Attribute="Y"><![CDATA[null]]></TIN>  
  <TIN_TYP Attribute="Y"><![CDATA[null]]></TIN_TYP>  
  <AD_ID Attribute="Y"><![CDATA[AD001]]></AD_ID>  
  <AD_LN_1 Attribute="Y"><![CDATA[null]]></AD_LN_1>  
  <AD_LN_2 Attribute="Y"><![CDATA[null]]></AD_LN_2>  
  <CITY Attribute="Y"><![CDATA[null]]></CITY>  
  <ST Attribute="Y"><![CDATA[null]]></ST>  
  <ZIP Attribute="Y"><![CDATA[null]]></ZIP>  
  <CTRY Attribute="Y"><![CDATA[null]]></CTRY>  
  <DLVRY_PT Attribute="Y"><![CDATA[null]]></DLVRY_PT>  
  <PYMT_AM Attribute="Y"><![CDATA[750.00]]></PYMT_AM>  
  <CMNT Attribute="Y"><![CDATA[null]]></CMNT>  
  <PYMT_CD Attribute="Y"><![CDATA[CE]]></PYMT_CD>  
  <CHK_EFT_NO Attribute="Y"><![CDATA[null]]></CHK_EFT_NO>
```

eMARS Check Writer Template

Check Writer Sample Input XML File

Payment Line Component

End Payment Line
Component

```
<TOT_ADNM_LN Attribute="Y"><CDATA[1]></TOT_ADNM_LN>  
<ACH_TRAN_CD Attribute="Y"><CDATA[null]></ACH_TRAN_CD>  
<ACH_RECV_ID Attribute="Y"><CDATA[null]></ACH_RECV_ID>  
<ACH_ACCT_NO Attribute="Y"><CDATA[null]></ACH_ACCT_NO>  
<ACH_RECV_NM Attribute="Y"><CDATA[12345]></ACH_RECV_NM>  
<PYMT_REMT_ADV Attribute="Y"><CDATA[INVOICE# A1123 -  
$200.00]></PYMT_REMT_ADV>  
</R_AP_CW_PYMT>
```

eMARS Check Writer Template

Addendum Component

Addendum Component

Start Addendum Component

End Addendum Component

```
<R_AP_CW_ADNM AMSDataObject = "Y">  
  <LN_NO Attribute="Y"><![CDATA[1]]></LN_NO>  
  < ACH_ADD_SEQ_NO Attribute="Y"><![CDATA[1]]></  
  ACH_ADD_SEQ_NO >  
  <ACH_PYMT_INFO  
  Attribute="Y"><![CDATA[RMT*IV*99933*500.00\DTM*003*041230\]]></AC  
  H_PYMT_INFO>  
  
</R_AP_CW_ADNM>
```

eMARS Check Writer Template



eMARS Interface Implementation

Key Dates

- Interface Designs October – December 2005
- Interface October 2004 – January 2006
Development
- Interface System Test January – March 2006
- User Acceptance Test / February - March 2006
Integration Test
- Performance Tests February - March 2006



eMARS Interface Implementation

- Reference Documents available on the eMARS website

<http://finance.ky.gov/internal/emars/>

- Interface Plan
- Inbound Interface Templates
- Outbound Interface Templates
- eMARS Check Writer Interface Files
- Contact – eMARS COT Interface Lead
 - Dave Tussey (Dave.Tussey@ky.gov)



Questions/Discussion

